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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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KILPATRICK STOCKTON LLP 607 14TH STREET, N.W. WASHINGTON, DC 20005			EXAMINER WINTER, JOHN M	
			ART UNIT	PAPER NUMBER
			3621	
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			07/11/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

09/634,755

Applicant(s)

COLEMAN ET AL.

Examiner

John M. Winter

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 11-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>5/22/2007</u> .   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### **Acknowledgements**

The Applicants amendment filed on March 24, 2006 is acknowledged, Claims 11-20 remain pending .

### ***Response to Arguments***

The Applicants arguments filed on April 26, 2007 have been fully considered.

The Applicant states that the claims of the present invention are directed towards a different purpose and are not obvious in view of the prior art.

Examiner responds that as per *Ex parte Clapp*, 227 USPQ 972 (Bd Pat App & Int) "To support conclusion that claimed combination is directed to obvious subject matter, the references must either expressly or impliedly suggest claimed combination or the examiner must present a convincing line of reasoning as to why artisan would have found claimed invention to have been obvious in light of the references teachings.", the Examiner states the reference deals with the generalized problem of data management and error detection and therefore would be obvious to a person of ordinary skill in the art.

The Applicant states that the prior office action contradicts the Examiner's earlier assertions regarding "likelihood" as "common" and "well known" by asserting that it is "vague and indefinite," additionally ignoring the accepted definition of "likelihood" in the field of the invention.

The Examiner states that the limitation "calculating the likelihood" is vague and indefinite, under 35 U.S.C. 112 , and construed to have the meaning "probability" for the purposes of rejection under 35 USC 103

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The Applicant states that the references fail to disclose all the elements of the claims, the prior Office Action improperly ignores the final clause of Claim 14.

The Examiner states that Claim 14 is clearly a structural claim and the term "that displays a result based on the calculated likelihood that changes to the set of input data are the result of one or more errors" is a non-functional descriptive item, the display could output any arbitrary data and the structure of the system would not be affected.

The Examiner states the claims 17-20 are rejected in view of Official Notice, these claims merely state different well know methods of performing statistical analysis. Applicant(s) attempt at traversing the Official Notice findings as stated in the previous Office Action is inadequate. Adequate traversal is a two step process. First, Applicant(s) must state their traversal on the record. Second and in accordance with 37 C.F.R. §1.111(b) which requires Applicant(s) to specifically point out the supposed errors in the Office Action, Applicant(s) must state *why* the Official Notice statement(s) are not to be considered common knowledge or well known in the art. In this application, while Applicant(s) have clearly met step (1), Applicant(s) have failed step (2) since they have failed to argue *why* the Official Notice statement(s) are not to be considered common knowledge or well known in the art. Because Applicant(s)' traversal is inadequate, the Official Notice statement(s) are taken to be admitted as prior art. See MPEP §2144.03.

The Examiner states that claim 16 is rejected in view of the newly discovered reference Laupin.

See following rejection.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 11, 14, 15 and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. These claims recite the limitation "calculating the likelihood" this limitation is vague and indefinite, since likelihood is a mere guess, no limitation is imposed upon the claimed invention.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11 and 14 –15 and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reboh et al., (US Patent No 4,866,634) in view of Huh et al. (US Patent 5,396,612).

As per claim 11,

Reboh et al. ('634) discloses a system for detecting abnormalities in input data to a financial risk management system, the system comprising:

a data processing server that receives a set of input data;(Column 4, lines 18-23)

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a computer storage device for storing one or more historical values, each historical value representing a previous set of input data;(Column 4, lines 24-34)

Reboh et al. ('634) does not explicitly disclose one or more central processing units calculating the likelihood that changes to the set of input data are the result of one or more errors. Huh ('612) discloses one or more central processing units calculating the likelihood that changes to the set of input data are the result of one or more errors; (Figure 8, Column 7, lines 60-67 – column 8, lines 1-33) it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the Reboh et al method with Huh ('612) method in order to reduce the cost of error correction in databases by providing a simple and inexpensive process to ensure the quality of the data being processed.

As per claim 14,

Reboh et al. ('634) discloses a system for detecting abnormalities in input data to a financial risk management system, the system comprising:

a data processing server that receives a set of input data;(Column 4, lines 18-23)

a computer storage device for storing one or more historical values, each historical value representing a previous set of input data;(Column 4, lines 24-34)

a graphical user interface (Column 4, lines 38-42)

The term “that displays a result based on the calculated likelihood that changes to the set of input data are the result of one or more errors” is a non-functional descriptive item. The term “that displays a result based on the calculated likelihood that changes to the set of input data are the result of one or more errors” could be replaced with other terms. i.e. “displaying a login

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screen” , etc and not change the limitations of the claim. PTO’s guidelines for examining claimed language require: the examiner must make a determination, whether the claimed invention “as a whole” would have been obvious at the time of invention to one of ordinary skill in the art. See MPEP 2142. In the pending claim, the examiner submits that particular language does not serve as a limitation on the claim. In other words **language that is not functionally interrelated with useful acts, structure, or properties of the claimed invention will not serve as a limitation**. See *in re Gulak*, 217 USPQ 401 (CAFC 1983), *ex parte Carver*, 227 USPQ 465 (BdPatApp& Int 1985) and *in re Lowry*, 32 USPQ2d 1031 (CAFC 1994) where language provided certain limitations because of specific relationships required by the claims

Reboh et al. ('634) does not explicitly disclose one or more central processing units calculating the likelihood that changes to the set of input data are the result of one or more errors. Huh ('612) discloses one or more central processing units calculating the likelihood that changes to the set of input data are the result of one or more errors; (Figure 8, Column 7, lines 60-67 – column 8, lines 1-33) it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the Reboh et al method with Huh ('612) method in order to reduce the cost of error correction in databases by providing a simple and inexpensive process to ensure the quality of the data being processed.

As per claim 15,

Reboh et al. ('634) discloses the system of claim 14,

Official Notice is taken that “displaying an icon indicating an error” is common and well known in prior art in reference to statistical analysis. It would have been obvious to one having

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ordinary skill in the art at the time the invention was made that an error would cause the user to be notified.

As per claim 17,

Reboh et al. ('634) discloses the system of claim 16,

Official Notice is taken that "the statistical analysis is performed by calculating the Shannon entropy" is common and well known in prior art in reference to statistical analysis. It would have been obvious to one having ordinary skill in the art at the time the invention was made that the statistical analysis is performed using Shannon entropy because this is a standard technique that is well known and found in any statistical analysis textbook.

Claims 18-20 are in parallel with claim 17 and are rejected for at least the same reasons.

Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reboh et al., (US Patent No 4,866,634) in view of Huh et al. (US Patent 5,396,612) and further in view of Masch (US Patent 5,930,762).

As per claim 12,

Reboh et al. ('634) discloses the system of claim 11,

Reboh et al. ('634) does not explicitly disclose the input data includes data feeds from one or more data processing systems. Masch ('762) discloses the input data includes data feeds from one or more data processing systems;(Column 2, lines 21-34) It would be obvious to one having ordinary skill in the art at the time the invention was made to combine the Reboh et al



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method with the Masch ('762) method in order to generate a sufficient amount of data to achieve statistical accuracy.

As per claim 13,

Reboh et al. ('634) discloses the system of claim 11,

Reboh et al. ('634) does not explicitly disclose the input data includes data calculated by a financial risk management system. Masch ('762) discloses the input data includes data calculated by a financial risk management system;(Column 2, lines 21-34). It would be obvious to one having ordinary skill in the art at the time the invention was made to combine the Reboh et al method with the Masch ('762) method in order to generate a sufficient amount of data to achieve statistical accuracy.

Claim 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reboh et al., (US Patent No 4,866,634) in view of Huh et al. (US Patent 5,396,612) and further in view of Statistics , Meaning and method; Lawerence Laupin, 1980.

As per claim 16,

Reboh et al. ('634) discloses the system of claim 11,

Reboh et al. ('634) does not explicitly disclose calculating the information content of the input data; and performing a statistical analysis of the calculated information content relative to the one or more historical values to determine the likelihood that changes to the input data are the result of one or more errors. Laupin discloses calculating the information content of the

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input data; and performing a statistical analysis of the calculated information content relative to the one or more historical values to determine the likelihood that changes to the input data are the result of one or more errors (Pages 247-248) It would be obvious to one having ordinary skill in the art at the time the invention was made to combine the Reboh et al method with the Laupin method in order to generate a sufficient amount of data to achieve statistical accuracy.

### *Conclusion*

Examiners note: Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John M. Winter whose telephone number is (571) 272-6713. The examiner can normally be reached on M-F 8:30-6, 1st Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Fischer can be reached on (571) 272-6779. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



John Winter

Patent Examiner -- 3621



ANDREW J. FISCHER  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600